

IN THE CLAIMS

Please amend the claims as indicated:

1. (currently amended) A method for language verification of a Java card CAP file created from an original Java code file, comprising:

a) a conversion step for converting said Java card CAP file into a corresponding converted Java code file that is semantically identical to said Java card CAP file, wherein said conversion step further includes:

a preconversion substep for converting Java card IDs contained in said Java card CAP file into symbolic names, and for converting said Java card CAP file into a standard Java format, to obtain a preconverted file; and

a mapping substep for replacing in said preconverted file externally defined names with original names by using a mapping scheme between Java names and tokenized identifiers, to obtain the converted Java code file for a language-verification step; and

b) a language-verification step for verifying said converted Java code file for compliance with Java language specifications.

2. (cancelled)

3. (currently amended) [[A]] The method for language verification of a Java card CAP file according to Claim [[2]] 1, wherein said mapping substep is performed using a referenced Java export file which is available as a result of creating said Java card CAP file from said original Java code file.

4. (currently amended) [[A]] The method for language verification of a Java card CAP file according to Claim 1, further comprising:

c) a signature step for creating, after verification of said converted Java code file in said language verification step, a second cryptographic signature file.

5. (currently amended) [[A]] The method for language verification of a Java card CAP file according to Claim 4, further comprising:

d) a loading step for loading the second cryptographic signature file to a storage device together with the Java card CAP file.

6. (currently amended) [[A]] The method for language verification of a Java card CAP file according to Claim 4, wherein the second cryptographic signature file is cryptographically verifiable, said method further comprising:

e) an executing step for executing said Java card CAP file upon a positive cryptographic verification.

7. (currently amended) A method for language verification of a reduced file derived from an original file, the reduced file conserving original semantics, said method comprising:

a) a conversion step for converting said reduced file into a corresponding converted file that is semantically identical to said reduced file, wherein said conversion step further includes:

a preconversion substep for converting IDs contained in said reduced file into symbolic names, and for converting said reduced file into a standard format, to obtain a preconverted file; and

a mapping substep for replacing in said preconverted file externally defined names with original names by using a mapping scheme, to obtain the converted file for use in a language-verification step; and

b) a language-verification step for verifying said converted file.

8. (cancelled)

9. (currently amended) [[A]] The method for language verification of a reduced file according to Claim [[8]] 7, wherein said mapping substep is performed using a referenced difference file which is available as a result of deriving said reduced file from said original file.

10. (currently amended) A computer program product comprising program code means for language verifying a Java card CAP file, comprising A computer-readable medium embodying

computer program code, the computer program code comprising computer executable instructions configured for:

a) first processes for converting said Java card CAP file into a corresponding converted Java code file that is semantically identical to said Java card CAP file; [[and]]

b) second processes for verifying said converted Java code file for compliance with Java language specifications;

converting Java card IDs contained in said Java card CAP file into symbolic names;

converting said Java card CAP file into a standard Java format, to obtain a preconverted file; and

replacing in said preconverted file externally defined names with original names by using a mapping scheme between Java names and tokenized identifiers, to obtain the converted Java code file.

11. (cancelled)

12. (currently amended) A computer-readable medium containing computer program code for a Java card CAP file language verifier for verifying a Java card CAP file that has been derived from an original Java code file, said Java card CAP file including original Java semantics of said original Java card file, the computer program code comprising instructions for:

a converter for converting said Java card CAP file into a corresponding converted Java code file that is semantically identical to said Java card CAP file, wherein said converter further includes:

a preconverter for converting Java card IDs contained in said Java card CAP file into symbolic names, and for converting said Java card CAP file into a standard Java format, to obtain a preconverted file; and

a mapper for replacing in said preconverted file externally defined names with original names under use of a mapping scheme, to obtain the converted Java code file;

and

a language verifier for verifying said converted Java code file upon its compliance with a Java language specification.

13. (cancelled)

14. (currently amended) ~~A Java card CAP file language verifier~~ The computer-readable medium according to Claim [[13]] 12, wherein the mapper comprises an input for receiving a referenced Java export file created when a referenced Java card CAP file was converted from its corresponding original Java code file.

15. (currently amended) The computer-readable medium of A Java card CAP file language verifier, according to Claim 12, further comprising wherein the instructions are further configured for a signature generator for generating a second cryptographic signature file.

16. (currently amended) The computer-readable medium of Claim 15, wherein the instructions are further configured for A Java card CAP file language verifier, according to Claim 15, further comprising a means for loading the second cryptographic signature file and the Java card CAP file to a storage device.

17. (currently amended) A computer-readable medium containing computer program code for a reduced file language verifier for verifying a reduced file that has been converted from an original file, the reduced file [[maintaining]] maintaining original semantics of the original file, [[comprising]] the computer program code comprising instructions for:

a converter for converting said reduced file into a corresponding converted file that is semantically identical to said reduced file, wherein said converter further includes:

a preconverter for converting IDs contained in said reduced file into symbolic names and for converting said reduced file into a standard format, to obtain a preconverted file; and

a mapper for replacing in said preconverted file externally defined names with original names under use of a mapping scheme, to obtain the converted file;

means for determining whether said reduced file complies with a predetermined language specification; and

a language verifier for verifying said converted file upon compliance with the predetermined language specification.

18. (cancelled)

19. (currently amended) ~~A reduced file language verifier according to Claim 18. The computer-readable medium of Claim 17,~~ wherein said mapper comprises an input for a referenced difference file which is available as a result from a conversion in which a referenced reduced file has been converted from its original file.